### MEDICAL REPORT

ON THE

### SANITARY CONDITION

OF

### CARLISLE

DURING THE YEAR 1894,

BY

WILLIAM BROWN, F.R.C.S.,

MEDICAL OFFICER OF HEALTH.

CARLISLE:

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1895.

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### CARLISLE URBAN SANITARY AUTHORITY.

Annual Report of the Medical Officer of Health.

TO THE CARLISLE URBAN SANITARY AUTHORITY. Gentlemen,

I have the honour of submitting to you my Annual Report on the Health of Carlisle during the year 1894, with an account of the Sanitary Work performed.

### STATISTICAL SUMMARY.

Area of District in	Acres			2,029
Estimated Populat	ion at l	Midsummer		40,500
Density of Populat	tion per	acre		19.9
Inhabited Houses	(189	91 census)	• • •	7,624
Rateable Value of	Distric	t	£	169,000
Births	• • •		• • •	1,315
Birth-rate	• • •	• • •	• • •	$32 \cdot 4$
Deaths		• • •	• • •	780
Death-rate	•••	* * *		19.2
Zymotic Deaths		• • •	• • •	44
Zymotic Death-rat	te	• • •	• • •	1.1
Infant Mortality		• • •		174
Ratio of Infant De	eaths to	Births per	1,000	133
Infectious Cases N	otified	• • •	• • •	246
Infectious Cases Is	solated	at Crozier J	Lodge	
Fever Hospit	tal			21
REGISTI	RATION	SUB-DISTRI	ICTS.	
St. Mary Sub-Dist	rict—P	opulation		24,622
St. Cuthbert do.		do.		15,878

### VITAL STATISTICS.

During the year the births of 1,315 children have been registered. Of these 654 were boys and 661 girls. The total gives a rate of 32.4 per 1,000 of the estimated population. Last year the birth-rate was 34.5 of the estimated population.

### MORTAL STATISTICS.

During the year ending December 31st, 780 deaths were registered in the Carlisle Urban Sanitary District. Of these 396 were males and 384 females. The death-rate was equal to 19.2 per 1,000 of the population estimated to the middle of the year. Last year (1893) 868 deaths were registered, the death-rate being equal to 21.6 per 1,000 of the estimated population. The following table gives the deaths of persons not belonging to the Carlisle Urban District. Making allowance for such deaths a death-rate of 18.3 is obtained.

Where Died.	Deaths of persons not belonging to the Carlisle Urban Sanitary District.				
Cumberland Infirmary				29	
Fusehill Workhouse				6	
Fever Hospital, Crozier	Lodge			2	
Home for Incurables			• • •	2	в
Her Majesty's Prison				1	
				<b>4</b> 0	

Table shewing the death-rate of Carlisle from 1874 to 1894 inclusive:—

77.	Deaths from	m all causes.		n Principal Diseases.	
Year.	No. Registered.	Rate per 1000 of population.	No. Registered.	Rate per 1000 of Population	
1874	1055	32.6	367	11.3	
1875	934	29.2	201	6.3	
1876	800	25.0	100	3.0	
1877	750	23.0	55	1.7	
1878	828	23.5	83	2.3	
1879	818	23.5	76	2.0	
1880	777	22.2	106	3.0	
1881	717	20.0	67	1.8	
1882	852	23.6	189	5.0	
1883	779	21.0	67	1.8	
1884	783	21.0	. 38	1.0	
1885	769	20.3	66	1.7	
1886	745	19.4	62	1.6	
1887	772 .	19.9	75	1.9	
1888	722	18.5	59	1.5	
1889	723	18.1	69	1.7	
1890	792	19.5	65	1.6	
1891	789	20.1	63	1.6	
1892	805	20.2	55	1.3	
1893	868	21.6	145	3.6	
1894	780	19.2	44	1.1	

DEATHS FROM THE EIGHT PRINCIPAL ZYMOTIC DISEASES.

The Returns shew 44 deaths from the principal Zymotic Diseases, representing a Zymotic death-rate of 1.1 per 1,000 of the estimated population. The number registered from each Zymotic Disease being as follows:—

•	_	.*			
Small Pox			• • •		—
Measles	• • •		• • •	• • •	20
Scarlet Fever			• • •		2
Diphtheria	• • •		•••	• • •	4
Whooping Cou	ıgh		•••	• • •	12
Typhus Fever			•••	•••	
Enteric Fever					2
Diarrhœa and	Dysente	rv			4
	v	•			
					44

### INFANT MORTALITY.

The deaths of 174 infants under one year of age have been registered. The ratio of infant deaths to births is 133 per 1,000, as compared with

1893	 	 178
1892	 	 123
1891	 	 137
1890	 • • •	 150
1889	 	 142
1888	 • • •	 129
1887	 	 141
1886	 • • •	 146
1885	 	 164

### SCARLET FEVER.

77 cases of Scarlet Fever have been notified, as compared with 184 cases last year. The disease was most prevalent during the first two quarters of the year. As to the age prevalence 21 cases were in children of from 3 to 6, and 19 in children of from 6 to 9 years old. The mortality was 1.5 per cent. of the cases notified.

Table shewing the number of Cases of Scarlet Fever. during the year 1894 arranged as to age:—

Under	1	yea	ar					4
From								3
22	2	,,	3	,,		• • •	• • •	4
			4		• • •			2
7 9	4	,,	5	22				8

								*
From	5	to	6	years	• • •			11
"	6	22	7	,,		• • •	• • •	9
,,	7	,,	8	,,	• • •	• • •	• • •	6
"	8	,,	9	"	•••	• • •	• • •	4
"	9		10	"	• • •	• • •	• • •	3
,,	10		11	"	• • •	• • •	• • •	3
13	11		12	,,	• • •	• • •	• • •	0
"	12		13	,,	• • •	• • •	• • •	2
"	13	//	14	22	• • •	• • •	• • •	3
"	14	"	15	22	• • •	• • •	• • •	2
22	15	.,	16	22	• • •	* * *	• • •	2
"	16	•	17	"	• • •	• • •	•••	1
"	17		18	"	• • •	• • •	• • •	1
"	18		19	"	• • •		• • •	1
,,,	19	"	20	"		• • •	• • •	0
Over	20	yea	ars	**	• • •	• • •	• • •	5
					Total			74
					Lotai			14

In three instances the ages of the patients were not ascertained, which, added to the 74 above referred to, gives a total number of 77, the number notified under the Act.

Number of Cases of Scarlet Fever reported each week, from 1st January to 31st December, 1894:—

	_					
			e 3rd of Ja	anuary	• • •	0
Week	endin	g 10th		,,		2
,,	,,	17th		"	• • •	1
"	,,	24th		;;	•••	7
"	"	31st		"	• • •	2
,,	"	$7  \mathrm{th}$	February	•••	• • •	5
,,	"	$14 \mathrm{th}$	,,	• • •	* * 4	5
13	1)	21st	"	• • •	• • •	1
"	"	28th	11		• • •	2
"	"		March			0
"	"	14th	,,	• • •	• • •	0
"	"	21st	"			2
		28th	"			2
"	"		April			0
"	"	11th	,,			1
"	11	18th				1
23	27	25th	"			Ô
,,,	2.2	2nd	Mav	• • •	• • •	ő
3 9	2.7	9th		* * *	• • •	0
,,	"	16th	21	• • •	• • •	1
"	1)	23rd	"	• • •	• • •	1
"	"	30th	"	• • •	• • •	3
2.2	"	90011	12			0

Week	ending	$6 \mathrm{th}$	June	•••	***	2
,,	,,	13th	"	• • •	• • •	2
"	"	20th	"	•••	•••	1
21	,,	27 th	"		•••	5
"	21	$4  ext{th}$	July	• • •	•••	0
"	"	11th	"		• • •	0
"	22	18th	22	• • •	• • •	3
22	27	25th	"	• • •		0
,,	22	1st	August		• • •	2
21	7,2	8th	,,			0
,,	2.2	15th	"		•••	0
22	22	22nd	71	• • •		2
,,	"	29th	22	• • •	•••	0
,,	72		September	•••	• • •	3
"	"	12th	,,	• •	•••	3
"	"	19th	,,	• • •	• • •	1
,,	"	26th		• • •	•••	0
22	22		October		• • •	1
27	"	10th	"	•••	• • •	$^2$ .
22	22	17th	79	•••		0
"	22	24th	27		• •	0
72	77	31st	,,	•••	• • •	1
27	"		November		• • •	0
22	"	14th	,,	• • •	• • •	1
"	27	21st	"		• • •	2
"	17	28th	"	• • •	• • •	2
13	"		December	• • •	•••	2
27	"	12th	22	• • •	••	1
"	21	19th	,,	100	• • •	0
"	,1 ,00,1	26th	, ,,		• • •	1
From	the 26tl	n to 3.	lst "			1

### MEASLES.

There have been 20 deaths from Measles as compared with 77 deaths last year. The mortality from the disease during the last 20 years has been as follows:—

1874		• • •		• • •	1
1875	• • •	• • •			56
1876	• • •	• • •			5
1877		• • •	••		12
1878			• • •		2
1879	• • •	• • •	• • •		22
1880					4
1881	• • •	•••	• • •	• • •	0
1882	• • •	• • •	* * *		36
1883		•••	•••		11
1884		• • •	•••	• • •	0
1885			• • •	• • •	22

		0			
1886	• • •		• • •		4
1887			• • •	• • •	16
1888				• • •	3
1889		• • •	• • •		44
1890	• • •	• • •		• • •	1
1891		• • •			22
1892	• • •		• • •		3
1893	• • •				77
1894					20

### SMALL POX.

Two cases of Small Pox were imported into the City during the spring of the year. The cases were those of male tramps admitted into the Fusehill Workhouse. They were promptly removed to the Fever Hospital.

### TYPHUS AND CONTINUED FEVER.

One case of Typhus Fever and two of Continued Fever were notified during the year. The case of Typhus was notified on the 30th March, and those of Continued Fever on the 9th January and 13th April. They were all removed to Crozier Lodge Fever Hospital.

### TYPHOID FEVER.

Fifteen cases of Typhoid Fever have been notified, as compared with twenty cases last year.

Tabular Statement of Cuses of Typhoid Fever during the year 1894, with the insanitary conditions present, and the action taken thereon.

	0 01001 0010.		
Date.	Locality.	Insanitary conditions present and action taken.	Result.
1894. May	Bousfield's Lane, Scotch Street.	Instructions given as to disinfection	One case. Recovered. No extension.
,,	Union Court, Scotch Street	Instructions given as to disinfection	One Case. Recovered. No extension.
August	Hasell Street	Instructions given as to disinfection Offensive Privies at rear of house	One Case. Recovered.
,,	Greystone Road	Notice served on owners Instructions given as to disinfection	No extension One case. Recovered. No extension.
,,	Hartington Place	Imported from Edinburgh Instructions given as to disinfection	One case. Recovered. No extension.
<b>,,</b>	Spencer Street	Imported from Allonby Water Closet defective	One case. Recovered.
99	St. Alban's Row	Instructions given as to disinfection House disinfected	No extension. One case. Died. No extension.

Date.	Locality.	Insanitary conditions present and action taken.	Result.
1894 August	Petteril Street	House disinfected	One case. Recovered. No extension.
October	Milbourne Street	House disinfected. Removed to Crozier Lodge. Drains at rear of house when tested found to be in a defective condition	One case. Recovered. Further case in house in November.
November	The Crescent	Probably imported from London Drains at rear of house when tested found to be in a defective condition	One case. Recovered. No extension.
"	Milbourne Street	Removed to Crozier Lodge. House disinfected. Drains at rear of house when tested found to be in a defective condition	One case. Recovered. No further extension.
22	Orchard Street	Removed to Crozier Lodge. House disinfected	One case. Recovered. No extension.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Greystone Road	Instructions given as to disinfection	One case. Recovered. No extension.
,,	Spencer Street	Instructions given as to disinfection Drains of house in a defective	One case. Recovered. No extension.
December	Wilfred Street	Removed to Crozier Lodge Instructions given as to disinfection	One case. Recovered. No extension.

### DIPHTHERIA.

29 cases of Diphtheria in 26 houses have occurred as compared with 70 cases and 52 houses last year. The mortality has been about 1 in 7 of the reported cases. In three of the houses minor sanitary defects were found to exist.

Tabular Statement of Cases of Diphtheria during the year 1894 with the insanitary conditions present and the action taken thereon.

Date.	Locality.	Insanitary conditions present and action taken.	Result.
January	Robert Street	House disinfected. Water closets stopped up on account of frost	One case. Died.
12	English Street	Instructions given as to disinfection	No extension. One case. Recovered.
91	Oswald Strect	Instructions given as to disinfection	No extension. One case. Recovered.
February	Orchard Street	House disinfected	No extension. One casc. Recovered.
13	Granville Road	Removed to Crozier Lodge. House disinfected	No extension. One case. Died.
29	Myddleton Street	Instructions given as to disinfection	No extension. One case. Rocovered. No extension.

Date.	Locality.	Insanitary conditions present and action taken.	Result.
April	East Norfolk Street		One case. Recovered.
,,,	Myddleton Street	Instructions given as to disinfection House disinfected	No extension. One case. Recovered.
May	Myddleton Street	House Disinfected. Offensive water closet in house	No extension. Two cases. One died.
July	Greystone Road	Removed to Crozier Lodge. Imported from Laugholm. Instruc-	No extension. Onc case. Recovered.
August	Aglionby Street	tions given as to disinfection Removed to Crozier Lodge. In- structions given as to disinfection	No extension Two cases. Recovered.
33	Portland Place	Removed to Crozier Lodge. House Disinfected. Drains at rear of	No extension. One case. Recovered.
,,	Elm Strect	house defective Disinfectants supplied. Water closet at rear of house defective	No extension. One case. Recovered. No extension.
September	Cumberland Infirmary	Removed to Crozicr Lodge	Two cases. Recovered.
,,	Charles Street	Instructions given as to disinfection	No extension. One case. Recovered.
13	Sewell's Lane, Rickergate	House disinfected	No extension. One case. Died.
"	East Street	Disinfectants supplied. Removed to Crozier Lodge	No extension. One case. Recovered.
October	Henry Street	Removed to Crozier Lodge. House disinfected	No extension. One case. Recovered.
15	East Norfolk Street	Instructions given as to disinfection	No extension. One case. Recovered.
99	Rigg Street	Disinfectants supplied	No extension. One case. Recovered.
91	Brunton Place	Instructions given as to disinfection	No extension. One case. Recovered.
November	Orchard Street	to Crozier Lodge. Rooms disin-	No extension. One case. Died. Reported as having died from
19	Chiswick Street	Instructions given as to disinfection	Scarlet Fever. No extension. One case. Recovered.
15	Flower Street	Removed to Crozier Lodge. House disinfected	No extension. One case. Recovered.
December	Muncaster Place	Instructions given as to disinfection	No extension. One case. Recovered.
11	Denton Street	Removed to Crozier Lodge. Instructions given as to disinfection	No extension. One case.

### EPIDEMIC INFLUENZA.

Influenza prevailed during the first quarter of the year, and again during the third quarter in a sporadic form. The severity of the disease now appears to be much diminished.

### NOTIFICATION OF INFECTIOUS DISEASES.

246 cases of infectious disease have been notified, as compared with 439 cases during the year 1893. The following table gives the number of cases reported during each quarter of the year:—

Table shewing the number of Notifications to the Sanitary Authority during the year of each disease specified in the Act.

Nature of Infectious Disease.	Number	of Notifica	tions sent	in during	TOTAL.
Nature of Infectious Disease.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	TOTAL.
Cholera Small Pox	0	0 2	0 0	0	0 2
Diphtheria Membranous Croup Erysipelas	$\begin{bmatrix} 7\\0\\29 \end{bmatrix}$	$\begin{array}{c} 4 \\ 0 \\ 24 \end{array}$	10 0 17	9 0 40	$\begin{bmatrix} 30 \\ 0 \\ 110 \end{bmatrix}$
Scarlet Fever & Scarlatina Typhoid & Enteric Fever	$\begin{vmatrix} 29 \\ 29 \\ 0 \end{vmatrix}$	17	17	14.	77 15
Typhus Fever Relapsing Fever	0	1 0	0	0	1 0
Continued Fever Puerperal Fever Diarrhœa (compulsory	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	1	0	0	3
notification from Aug. 14 to Oct. 31)	0	0	5	0	5
Totals	69	52	53	72	246

In one instance two notifications of Diphtheria were sent in relating to the same case.

In two instances two notifications of Erysipelas were sent in relating to the same case.

The case of Typhus Fever was first reported as one of Continued Fever.

### ISOLATION OF INFECTIOUS CASES.

The Sanitary Authority has isolated at Crozier Lodge 21 cases of Infectious Diseases during the year, consisting of 8 of Scarlet Fever, 4 of Typhoid Fever, 1 of Typhus Fever, 1 of Continued Fever, and 7 of Diphtheria. Last year 43 infectious cases were isolated, viz.:—21 of Scarlet Fever, 13 of Diphtheria, 2 of Typhoid Fever, 1 of Typhus Fever, 5 of Small Pox, and 1 of Erysipelas.

### HOUSE REFUSE DISPOSAL.

Practically the remaining ashpits, numbering about 550, have been abolished during the year. Mr. Hill, the Inspector of Nuisances, informs me that the financial saving to the City through the present system of removing the ashes and house refuse is £275 per annum.

### FACTORY AND WORKSHOPS ACT, 1891.

The Factory and Workshops Act, 1891, has thrown a great increase of work upon the Sanitary Staff. The inspection of the workshops, including some 500 rooms, has not been completed, but we hope to embrace the details of the inspection in a tabulated statement at an early date.

### COMMON LODGING HOUSES.

The Common Lodging Houses in the City have been regularly inspected by the Inspector, and they are in a satisfactory condition.

### EXAMINATION OF MEAT.

During the year I have been called to examine the carcases of 26 animals, as compared with 33 last year;  $21\frac{1}{2}$  of the carcases were pronounced by me to be unfit for human food. 20 of the carcases were affected with tuberculosis.

### PROSECUTIONS.

Four prosecutions were instituted during the year for the exposure for sale of bad meat and fish, and in each instance the defendants were heavily fined. The bad fish exposed for sale for which legal proceedings were taken were those of two salmon affected with salmon fungus (saprolegnia ferax). The defence was based upon a statement in the 21st Annual Report of the Inspectors of Salmon Fisheries (Mr. Walpole and Professor Huxley), in which it is stated "that the salmon disease appears to be a purely cutaneous affection, and the fish appear to die partly from irritation and consequent exhaustion, and partly, perhaps, from the drain on their resources caused by the production of so large a mass of vegetable matter at their expense. The flesh of diseased salmon, however extensive the morbid affection may be, presents no difference in texture or colour from that of a healthy fish, and those who have made the experiment declare that the flavour of a diseased fish is as good as a healthy one." It will be noticed that the question of the wholesomeness of salmon suffering from this particular fungus is carefully avoided, but the fact of the disease being capable of producing the death of salmon (and often in large numbers) is prima facie evidence that salmon so affected are frequently unfit for human food. Both the salmon condemned were in an advanced stage of the disease (one having lost its head), and the fact of there being numerous discharging surfaces (sores) on various parts of their bodies would indicate that the poisonous substance had been absorbed into the blood of the fish.

I am, Gentlemen,
Your obedient Servant,
WILLIAM BROWN,
Medical Officer of Health.

CARLISLE,

January 18th, 1895.

TABLE I.
BIRTHS, 1894.

Quarter		St. Mary		ST	. Ситнве	R <b>T.</b>	TAL FOR CITY.
Ending.	Males.	Females.	Total.	Males.	Females.	Total.	Torat
March 31 June 30 September 30 December 31	78 102 92 104	105 98 93 69	183 200 185 173	62 72 80 64	83 63 75 75	145 135 155 139	328 335 340 312
Totals	376	365	741	278	296	574	1315

TABLE II.

DEATHS, 1894.

		ST	. Mary	•			St. (	Cuthbei	RT.		CITY.
QUARTER ENDING.	Ma	les.	Fem	ales.	i.	Ma	les.	Fem	ales.	.1.	FOR
	Under 5 years		Under 5 years		Total.			Under 5 years	5 and above	Total.	Torar
March 31 June 30 Sept. 30 Dec. 31		35 30 33 41	19 18 8 17	31 35 36 47	108 97 90 131	12 21 14 16	46 16 19 37	14 5 16 20	35 32 24 27	107 74 73 100	215 171 163 231
Totals	76	139	62	149	426	63	118	55	118	354	780

TABLE III.

Table shewing the Annual Birth-rate, Rate of Mortality, Death-rates among Children, Deaths in Public Institutions, and Deaths from Seven Principal Zymotic Diseases, for the Year 1894, and Ten Years preceding.

-		Annual Street, or other Desires, or other Desire			AND WATER			MATE ACTUM					
Deaths from 7 Principal Zymotic Diseases	Rate per 1000 of Population.	1.1	3.6	1.3	1.6	1.6	1.7	1.5	1.9	1.6	1.7	1.0	1.7
Deaths from Zymotic	No. Registered.	44	145	55	63	65	69	59	75	62	99	38	69
	Deaths in Public Institutions	132	117	124	114	85	105	95	118	92	81	66	103
Deaths of Children under 5 years.	Per centage of Total Deaths.	32.8%	47.9%	29.5%	31.0%	34.7%	37.3%	35.0%	33.9%	36.3%	41.8%	39.2%	36.6%
Deaths of Childi under 5 years	No. Registered.	256	416	235	245	275	270	253	262	271	322	307	285
er one year.	Per centage of Regis- tered Births.	13.2%	17.8%	12.3%	13.7%	15.0%	14.2%	12.9%	14.1%	14.6%	16.4%	15.8%	14.7%
Deaths of Children under one year.	Per centage of Total Deaths.	22.3%	28.5%	18.6%	21.0%	23.1%	24.1%	23.4%	22.3%	24.7%	27.4%	26.3%	23.9%
Deaths of C	No. Registered.	174	248	150	166	183	174	169	172	184	211	206	186
Deaths.	Rate per 1000 of Population.	19.2	21.6	20.2	20.1	19.5	18.1	18.5	19.9	19.4	20.3	21.0	19.8
Dea	No. Registered	780	868	805	789	79-2	723	722	772	745	769	783	777
ths.	Rate per 1000 of Population.	32.4	34.5	30.5	30.8	30.0	30.6	33.5	31.3	33.0	34.0	35.0	32.3
Births	No. Registered.	1315	1389	1213	1207	1215	1224	1307	1214	1262	1285	1303	1262
	Year.	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	Average of 10 years 1884-1893

### TABLE IV.

Shewing the Number of Deaths at all ages in 1894, from certain groups of Diseases, and proportions to 1,000 of Population, and to 1,000 Deaths from all causes; also the Number of Deaths of Infants under one year of age from other groups of Diseases, and proportions to 1,000 Births and to 1,000 Deaths from all causes under one year.

Division I. (All ages).	Total Deaths.		Deaths per 1000 of Total Deaths at all ages.
1. Principal Zymotic Diseases 2. Pulmonary Diseases 3. Principal Tubercular Diseases	44	1.1	56.4
	137	3.4	175.6
	68	1.7	87.2
Division II. (Infants under one year.)	Total Deaths.	Deaths per 1000 of Births.	Deaths per 1000 of Total Deaths under one year.
4. Wasting Diseases	67	50.9	261.7
5. Convulsive Diseases	26	19.7	101.5

- 1. Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Typhus, Enteric (or Typhoid), and Simple Continued Fevers, and Diarrhœa.
- 3. Includes Phthisis, Scrofula, Tuberculosis, Rickets, and Tabes.
- 4. Includes Marasmus, Atrophy, Debility, Want of Breast Milk, and Premature Birth.
- 5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

TABLE V.

Table shewing the Number of Deaths from the principal Zymotic Diseases in the 10 Years 1884 to 1893 and in the Year 1894.

Total Proportion Deaths of Deaths to in 1894.	:	25.7	2.6	5.1	15.3	2.6	5.1	56.4	•
Total Deaths in 1894.	•	20	2	4	12	: 83 :	4	44	1.1
Annual Average Proportion of Deaths to 1000 Deaths in 10 years, 1884—1893.	4.	24.7	9.0	5.9	22.9	6.7	19.2	7.68	:
Annual Average of 10 Years 1884—1893	ကဲ့	19.2	7.0	4.6	17.8	5.2	14.9	69.7	1.7
1893	-1	22	11	11	20	: 10	20	145	3.6
1892	:	က	4	14	23	4 eo :	4	55	1.3
1891	:	22	21	73	7	: 23 :	6	63	1.6
1890		H	22	9	12	: 62 :	22	65	1.6
1889	* *	44	•	70	ω	:∹ :	11	69	1.7
1888	2	က	•	:	32	⊣∞ :	13	59	1.5
1887	•	16	П	ಣ	22	2 17 	14	75	1.9
1886	:	4	7	က	19	:9 :	23	62	1.6
1885	:	22	23	o 0	31	:⊣ :	10	99	1.7
1884		•	67	2	4	: -:	23	38	1.0
Disease.	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Enteric Simple continued	Diarrhea	Totals	Rate per 1000 per annum of population

TABLE VI.—Table of Deaths during the year 1894 in the Urban Sanitary District of Carliste, classified according to Discuses, Ages, and Localities.

											1			
		TOTAL.		129	53	1 73	: 4	116	62 2	:	256		:	36
	*səs	All Other Disea	30	77	36	::	: 07	61	36	: -	142 277		: :	222
u		.səiminI	29	CJ 7C	400	: :		C/1 C/1		: :	9			700
ildre		Heart Disease.	28	37.	9	: :	: 63	23 02	14	: :	98			67
Mortality from subjoined Gauses, distinguishing Deaths of Children under Five Years of Age.	·Ksi.	Bronchitis, Pne monia, & Pleur	27	31	: 07	: :	: :	29	3 : 10	: :	69	ty.		-
hs (		Phthisis.	26	31:	: :	. :	-: -:	07 6	: 9	::	200	mortality.		
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nis A		Diarrhea and	23	:	: :	: :	: :	0.7	: : :	: :	":	rds		
ing s of	'ų:	Whooping Coug	22	9	: :	: .	_;	9	: : :	: :	12	00	:	
dist		Measles.	2	6 :	: :	: :	: :	11	: : :	: :	20 12	e re	:	
oined Causes, distingnunder Five Years of		Erysipelas.	20				: :	:	: ::	: :	1 : :	above records		
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noiq	Fevers.	Continued.	16							: :		of of	<u> </u>	
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1.51		Typhus.	14	: :	: :	: :	::	:	: :	: :	: :			
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rta		Diphtheria.	12	C7 .	: .	н :	: :	-		1 :	4	un	:	::
Mo		Scarlatina.	11	: -	: :	<b>-</b> :		:	: : :	: :	HH	18		<del>-</del> :
		Smallpox.	10	::	: :	:	: :	:		: :		200		1 :
				ro w	10 m	10 m	10 m	10 11			1	ntc		
			6	Under 5 5 upwds.	Under 5 5 upwds.	Under 5 5 upwds.	Under 5 (5 upwds.	Vinder 5	Cnder 5 (5 upwds.	Under 5 5 5 upwds.	Under 5	be taken into account in	Under 5	Under 5 (5 upwds.
		sbrawqu bas 33	00	91	70	:	67	99	30	:	194	2	:	6
ses at	•	25 and under 65	7	107	32		72	84	32	Н	259	ve also	:	18.
l Cau ges.	•9	15 and under 25	9	15	11	:	:	16	:	:	42	rs ha	:	10
Mortality from all Causes subjoined Ages.		5 and under 15.	70	17	- TO	1	•	7	:	:	29	umbe	:	4
ity fr		l and under 5.	4	36	4	62	:	39	П	:	82	ned n	:	2/1
Iortal		Under 1 Year.	ಣ	93	ಣ	:	:	22		:	174	bjoin	:	63
A		At all Ages.	62	359	09	ಣ	4	289	64	,	1	The subjoined numbers hav		40
	Names of Localities	adopted for the purpose of these Statistics; public institutions being shown as separate localities.	1	St. Mary Sub-Dist.	Cumberland (S. Mary)	Fever Hospital do.	Home for do.	St. Cuthbert SDist.	Fusehill (S. Cuth-Workhouse bert)	H.M. Prison do.	TOTALS780		Deaths occuring outside the district among per- sons belonging thereto.	Deaths occuring within the district arrong Persons not belonging thereto.

### TABLE VII.

Mortality from Diarrhæa and Typhoid Fever, 1874-1894.

Deaths	Typhoid Fever.	No. Registered.	23	10	20	11	11	15	7	6	∞	7	Н	9	17	8	-	67	ঝ	က	, C	7	8.4
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	mper	9voV	:	:9	တ	_	<u>,                                    </u>	<del>,</del> –	:	:	,—	<del>,  </del>	-	-	:	:	:	П	:	:	07	23	1.0
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DI		.əun C	17	۲ :	27	က	07	:	ଠା		:	H	Н	07	2	:	:	:	П	:	67	:	1.1
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	ary.	nueC	ଷଦ	1 က	61	-	CJ.	•	:	:	:	cvi			-	Н	C)	:	Н	_	:	:	1.0
	Autumn Quarter.	Rate per- 1000 of population	4.3	1.43	1.18	3.05	.46	3.51	.78	1.84	.87	1.50	.42	80.	.72	.82	09.	1.58	.51	.20	68.	.10	1.37
	Autumr	No. Regis- tered.	35	12	10	56	4	3]	_	17	∞ ;	14	4	00	~	∞	9	15	2	7	6	П	12.2
	Year.		1874	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	Average for 20 years 1874—1894

TABLE VIII.

CARLISLE URBAN SANITARY AUTHORITY.

Deaths Registered from all Causes during the year 1894.

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	75 to 85			27	44	61	75			:	:	:	: :	:	:	:	:
	65 to 75			11	76	7	104				:	:	: :	:	:	:	:
	55 to 65			23	66		93			:	:	:	: :	:	:	:	:
*.	45 to 55			15	34		52			:	:	•		:	:	:	:
AGES	35 to 45	_	: : :	238	29	-	63			:	:	:	: :	:	:	ī	: "
4	25 to 35	-	:-:	: 18	21 6	41	51			:	:	:	: :	:	:	:	. 7
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		DISEASES	: :	: :			:	ISEASES.		:	:	: :	:	:	:	lefined F	Thomas
	ATH.	TMOTIC		SES			:	OR ZYMOTIC DISEASES.		ated	ement	:	:	:	:	and Ill-c	Taron
	OF DEATH.	CLASSES.	EASES	l Diseas L Diseas	ZIOLENCE	CAUSES	TOTALS	, or Zyn	seases.	Vaccinated	No statement	, .	ver	2	Cougn	ntinned.	Tunhoid Faron
	CAUSE	CLASSES. Specific Febrile, or Zymotic Diseases	Parasitic Diseases Dietic Diseases	DEVELOPMENTAL DISEASES TOGET PROFESSIONAL	DOCAL DISEASES  DEATHS FROM VIOLENCE DEATHS FROM ITT. DEE	SPECIFIED		I.—Specific Febrile,	I.—Miasmatic Diseases.	Grand Harris	Sunanipox	Measles	Scarlet Fever	Typnus	Willoping	Simple, Continued, and Ill-defined Fever	Enterio or
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Other Miasmatic Diseases  8.—Diarrhwal Diseases. Simple Cholera Diarrhoa, Dysentery	Accompany Diseases.  Remittent Fever Ague  4.—Zoogenous Diseases. Cowpox and effects of Vaccination	bia,	Stricture of Urethra	Pyemia, Septicamia Puerperal Fever	able Parasi other Anin		IV.—Constitutional Diseases. Rheumatic Fever, Rheumatism of the Heart

TABLE VIII—continued.
CARLISLE URBAN SANITARY AUTHORITY.

1894.
year
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from
registered
Deaths

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CAUSE OF DEATH.	0 1	1 to 5	5 15 15	15 to to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	.75 to 85	bns 38 sbrawqu	Totals.	55 to 60
V.—Constitutional Diseases—continued. Rheumatism	:		:	ম		:	:	-	:	:	:	က	:
Rickets Cancer, Malignant Disease	: : :	: : :	: : :	: : :	::0		: :3	:::2	: :6	: : 87		43	: : :
Tabes Mesenterica Tubercular Meningitis, Hydrocephalus Phthisis Other Forms of Tuberculosis, Scrofula Purpura, Hæmorrhagic Diathesis	по-га :	:4⊢ : :	ㅋㅋㅋ : :	: :23::	:: ‡:::	: :68	: : ന : :	::0101	: : :			22 28 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
Anæmia, Chlorosis, Leucocythæmia Glycosuria, Diabetes Mellitus Other Constitutional Discases			::::	: : :	∾ : :	∾ : :			- : :		• • • •	:ro	
.—Developmental Diseases.  Premature Birth Atelectasis  Congenital Malformations	26	· · · ·	* * * *	: : : :		: : : :	: : : :	::: ణ	: : : 6		10	26 1 5 49	: : : :
T.—Local Diseases.  1.—Diseases of Nervous System. Inflammation of Brain or Membranes Apoplexy Softening of Brain, Hemi-	67	4	ಬ	61	61 F	07 F	: 10	: 0	: £	: -	*	17	:
plegia, Brain Faralysis	:	:	:	:	<u> </u>	7	0	13	17	4	:	41	:

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Insanity, General Paralysis of the Insane  Epilepsy	uns of Special Sense. Eye, Nose) Disease of Ear	3.—Diseases of the Circulatory System. Pericarditis Acute Endocarditis Valvular Diseases of Heart Other Diseases of Heart Aneurism Embolism, Thrombosis Other Diseases of Blood Vessels	4.—Diseases of Respiratory System.  Laryngitis Croup Emphysema, Asthma Bronchitis Pheumonia Pleurisy Other Diseases of Respiratory System	5.—Diseases of Digestive System.  Sore Throat, Quinsy Diseases of Stomach Enteritis Obstructive Diseases of Intestine Peritonitis

### TABLE VIII—continued.

# CARLISLE URBAN SANITARY DISTRICT. Deaths registered from all Causes during the year 1894.

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	65 to 75	:03 :03	\$ •	7	:01 ::	:::::
	55 to 65	::-:	:	:	00 ::	
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	15 to 25			:	:- ::	: H : : :
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	CAUSE OF DEATH	VI.—Logal Diseases—continued.  Ascites Jaundice and other Diseases of Liver Other Diseases of Digestive System	6.—Diseases of Lymphatic System. (e.g., of Lymphatics and of Spleen) Hodgkin's Disease	7.—Discuses of Gland-like Organs of Uncertain Use. (e.g., Bronchocele, Addison's Disease) Goitre	8.—Diseases of Urinary System. Nephritis Bright's Disease, Albuminuria Disease of Bladder or of Prostate Other Diseases of the Urinary System	9.—Diseases of Reproductive System. A. Of Organs of Generation. Male Organs Emale Organs B. Of Parturition. Abortion, Miscarriage Puerperal Convulsions

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rth	s I Joints	System.  Integumentary			::
ding ild Bi	d Joints. Periostitis Bones and	<i>ry Sy</i> . 		sucol	* *
Placenta prævia, Flooding Other Accidents of Child Birth	iseases of Bones and Joints. Caries, Necrosis Arthritis, Ostitis, Periostitis Other Diseases of Bones and Joints	—Discases of Integumentary System. Carbuncle, Phlegmon Other Diseases of Integui	OM VIOLENCE.	Fractures and Contusions Gunshot Wounds  Cut, Stab  Burn, Scald  Poison  Drowning  Suffocation  Otherwise  Micide.  Murder	t Wounds
Placent Other A	10.—Diseases of Bones and Joints. Caries, Necrosis Arthritis, Ostitis, Periostit Other Diseases of Bones an	11.—Discuses of Carbuncle Other I System	VII.—Deaths from Violence.  1.—Accident or Negligence.	Fractures and Gunshot Wour Cut, Stab Burn, Scald Poison Drowning Suffocation Otherwise  2.—Homicide. Manslaughter Murder	3.—Suicide. Gunshot Wounds Cut, Stab

TABLE VIII—continued.

## CARLISLE URBAN SANITARY DISTRICT.

Deaths registered from all Causes during the year 1894.

1C	to 60		: : :	:	:::::::
	Totals.		: □ : :		: 4 1 8 8 5 7 : 7 2
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	75 to 85		::::	:	:::::::::::::::::::::::::::::::::::::::
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		ntinued.		:	INED AND NO.
	3 DEATH	VIOLENGE—continued.		:	M ILL-DEFINED CAUSES.  trophy, Inanition n
	CAUSE OF	VIIDEATHS FROM VIC	Poison Drowning Hanging Otherwise	4-Execution Hanging	VIII.—Deaths from Ill-defined Specified Causes.  Dropsy Debility, Atrophy, Inanition Mortification Tumour Abseess Hæmorrhage Budden Death (cause not a Causes not Specified or Ill-de

### SUMMARY OF TABLE VIII.

		No. of Deaths.
I Specific Echnile on Zametic Discusses		
I.—Specific Febrile, or Zymotic Diseases—  1. Miasmatic Diseases		40
2. Diarrheal ,,	111	4
3. Malarial ,,		
4. Zoogenous "		
5. Venereal ,,		2
6. Septic ,,		1
II.—Parasitic Diseases		
II.—Farasitic Diseases	• • •	***
III.—Dietic Diseases		2
TIL, DIOUG DISOUSOS (	• • •	
TV.—Constitutional Diseases		142
T D 1 1 m 4 fall D' 1 m 4		0.1
V.—Developmental Diseases	• • •	81
VI.—Local Diseases—		
1. Diseases of Nervous System		86
2. Diseases of Organs of Special Sense		1
3. Diseases of Circulatory System	• • • •	107
4. Diseases of Respiratory System	•••	137
5. Diseases of Digestive System	• • • •	38
6. Diseases of Lymphatic System		3
7. Diseases of Gland-like Organs of Uncertain Use		2
8. Diseases of Urinary System		23
9. Diseases of Reproductive System		
(a). Diseases of Organs of Generation		2
(b). Diseases of Parturition		4
10. Diseases of Bones and Joints		7
11. Diseases of Integumentary System		2
VII.—Violence—		
1. Accident or Negligence		24
2. Homicide		
3. Suicide		2
4. Execution	• • •	•••
VIII.—Ill-defined and not Specified Causes		70
To	ota]	780
	- 0001	, 03

TABLE IX.

LOCALITIES OF DEATHS FROM PRINCIPAL ZYMOTIC DISEASES.

LOCALITY			Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping	Typhus Fever	Typhoid Fever	Diarrhœa
St. Mary Sub-District				4						
Back Duke Street	• • •	- 1		1					•••	• • •
Castle, The			• • •				1	•••	• • •	• • •
Church Street (Cummin				• •	1			• • •	•••	••
Corporation Road	•••	• • •			• • •		1	• • •	•••	•••
Denton Street	***		• • •	1	*1	1.1	• • •	• • •	*1	• • •
Fever Hospital Finkle Street	• ••	• • •		• • •	*1	+1	"	• • • •	_	***
Garfield Street	• • •	• • •	•		•••	• • •	1	•••	•••	• • •
T I Ov.	***	• • •	- 1	1	• • • •			• • •	• • •	•••
John Street Leatham Street	***	• • •		• • •		• • • •	1 1	• • •	• • • •	• • •
Tr. Co.	* * *		•••		• • • •			• • •	••••	• • •
Lime Street Lorne Street	***	***	- 1	$\frac{2}{1}$	• • •		• • •	***	•••	• • •
Milbourne Street	* * *	• • •		1		• • •	•••	• • •	•••	•••
Myddleton Street		- 1			• • • •	1		• • •	•••	• • •
70 . () 7	***		•••}	• • •	}		1		•••	• • •
Rigg Street	***	- 1		• •	•••	• • •	_	***	• • • •	1
Scotch Street (Sewell's	Count)	- 1	• • •	1	•••	 1	•••	***	• • •	
Scott Street			••		• • •	1	• • • •	• • •	• • • •	1
Saint Alban's Row	• • •	- 1	•••	••	• • •	••	•••	• • • •	1	
Thomas Street	•••	- 1		 1	• • •	• • •				• • •
a nomas porceu	•••	•••	• • •		••	• • •	•••	•••	•••	• • •
St. Cuthbert Sub-Distric	t—						İ			
Botchergate				2			1			
Brook Street	•••		- 1				1			
Charles Street			- 1	2						
Close Street	•••			2						
East Street	•••						1			
King's Arms Lane	•••			1						
Lamplugh Street	•••									1
Lord Street	• • •						1			
Princess Street	d- 4x 4			1						
Robert Street	• • •					1				
South Street				1			1			1
Union Street	• • •		[	1			1			
William Street				1						
Total				20	2	4	12		2	4

Removed from Stanwix District. + Previous Residence not given.